



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,983	10/28/2003	Bart Gerard Boucherie	BOUC3014/JEK	3976
23364	7590	01/25/2006	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			HUSON, MONICA ANNE	
			ART UNIT	PAPER NUMBER
			1732	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Am

Office Action Summary	Application No. 10/693,983	Applicant(s) BOUCHERIE, BART GERARD	
	Examiner Monica A. Huson	Art Unit 1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 12 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>102803</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the paper filed 30 December 2005.

Election/Restrictions

Applicant's election of claims 1-16 in the reply filed on 30 December 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 17-22 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected apparatus, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 30 December 2005.

Claim Objections

Claims 4 and 6 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claims do not limit the subject matter of transferring the molding pieces from one mold part into another mold part.

Claim 7 is objected to because of the following informalities: The claim on which Claim 7 is dependent is missing. For purposes of examination, it will be held that Claim 7 is dependent upon Claim 1. Appropriate correction is required.

Claim 9 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The claim does not limit the subject matter of a rotating third mold series.

Claim 13 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claims. See MPEP § 608.01(n). Accordingly, the claim 13 not been further treated on the merits.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Bodmer et al. (U.S. Patent 6,783,346). Regarding Claim 1, Bodmer et al., hereafter “Bodmer,” show that it is known to carry out a method for manufacturing injection molding pieces comprising two components whereby a first injection molding piece is formed of a first component in a first mold impression and a second injection molding piece is formed by putting the first injection molding piece in a second mold impression, and by providing a second

Art Unit: 1732

component on the first injection molding piece, wherein a mold with at least three series of mold parts is used, namely a first series, a second series and a third series respectively, whereby every series has at least one first mold part which can form a wall for the first mold impression when forming a first injection molding piece, as well as at least one second mold part which can form a wall for the second mold impression when forming a second injection molding piece; wherein the first series of mold parts and the second series of mold parts can alternately work in conjunction with the third series of mold parts, in order to inject at least one first injection molding piece as well as at least one second injection molding piece in the mold impressions formed thereby; and wherein, during the alternating presentation, a mutual repositioning of every first injection molding piece concerned is obtained, such that it ends up in the accompanying second mold impression (Column 2, lines 38-58; Column 5, lines 1-19, 39-51).

Regarding Claim 2, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein aforesaid repositioning is realized by changing the places of the first injection molding pieces after their production by removing them from a mold part with which they have been made into the other mold part which is part of the same series (Column 5, lines 1-19).

Regarding Claim 3, Bodmer shows the process as claimed as discussed in the rejection of Claim 2 above, including a method wherein said first injection molding pieces are moved by means of a transfer part which is active between the mold parts of the series concerned or by means of a robot (Column 5, lines 1-19, 59-66).

Regarding Claim 14, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein while the mold is being closed, at least one series of mold parts is kept outside the injection molding cycle (Figure 1).

Regarding Claim 15, Bodmer shows the process as claimed as discussed in the rejection of Claim 14 above, including a method wherein at the series of mold parts which is kept outside the injection molding cycle, at least a repositioning as mentioned above is realized (Figure 2).

Regarding Claim 16, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, including a method wherein the first series of mold parts and the second series of mold parts alternately work in conjunction with the third series of mold parts by making the first and the second series on the one hand and the third series on the other hand alternately carry out a translation movement (Figures 1 and 2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodmer, in view of Boucherie (U.S. Patent 6,379,139), hereafter "Boucherie '139".

Regarding Claim 4, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show leaving the mold first injection pieces when opening the

Art Unit: 1732

mold on the mold part concerned of the first and second series. Boucherie '139 shows that it is known to carry out a method including a method wherein aforesaid repositioning is realized by leaving the first mold injection pieces, after their production, when opening the mold, on the mold part of the first series (6) in which they have been made, on the mold part (10) of the second series in which they have been made respectively, and by making sure that, at the next co-operation of the first series with the third series, of the second series with the third series respectively, the mutual position of the mold parts of the first series in relation to the third series, of the mold parts of the second series in relation to the mold parts of the third series respectively, is changed (Column 3, lines 3-45; Column 4, lines 1-6). Boucherie '139 and Bodmer are combinable because they are concerned with a similar technical field, namely, methods of multistep molding using movable multicavity molds. It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie '139's repositioning sequence during Bodmer's molding process in order to avoid the need for transfer mechanisms.

Regarding Claim 6, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, including making use of a first series and a second series whose mold parts assume opposite positions (Figure 1), but he does not show leaving the mold first injection pieces when opening the mold on the mold part concerned of the third series. Boucherie '139 shows that it is known to carry out a method wherein aforesaid repositioning is realized by leaving the first injection molding pieces, after their making, when opening the mold on the mold part concerned of the third series (Column 3, lines 3-45; Column 4, lines 1-6). It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to use

Art Unit: 1732

Boucherie '139's repositioning sequence during Bodmer's molding process in order to avoid the need for transfer mechanisms.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bodmer, in view of Boucherie (EP 678 368). Bodmer shows the process as claimed as discussed in the rejection of Claim 4 above, but he does not show rotation of the first or second mold parts. Boucherie shows that it is known to carry out a method wherein the mutual position is changed by subjecting one or several of the first and second series of mold parts to a rotation, in particular in relation to a support upon which they have been provided (Column 3, lines 48-53). Boucherie and Bodme are combinable because they are concerned with a similar technical field, namely, methods of multistep molding using movable multicavity molds. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie's rotatable first and second molds during Bodmer's molding process in order to obtain varying cavity arrangements.

Claims 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bodmer, in view of Boucherie.

Regarding Claim 7, Bodmer shows the process as claimed as discussed in the rejection of Claim 1 above, but he does not show mutual rotation of the molds. Boucherie shows that it is known to carry out a method wherein the first series of mold parts and the second series of mold parts preferably alternately cooperate with the third series of mold parts by making the first and second series on the one hand, and the third series on the other hand carry out a mutual rotational

Art Unit: 1732

movement (Column 6, lines 38-58; Column 7, lines 1-10. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie's rotatable molds during Bodmer's molding process in order to obtain varying cavity arrangements.

Regarding Claim 8, Bodmer shows the process as claimed as discussed in the rejection of Claim 7 above, but he does not show a specific axis of rotation that is parallel to the closing direction of the mold. Boucherie shows that it is known to carry out a method wherein the aforesaid rotational movement is realized around an axis of rotation which is parallel to the closing direction of the mold parts concerned (Figures 5 or 6's axes of rotation are parallel to the closing direction of the mold parts (See Figure 3 for partial side-view)). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to use Boucherie's specific axis of rotation in Bodmer's molding process in order to accommodate specific space constrictions in the area of the mold processing.

Regarding Claim 9, Bodmer shows the process as claimed as discussed in the rejection of Claim 8 above, including a method wherein the third mold is rotatable on an axis inside first and second molds. It is being held that reversal of relative movement is an obvious choice for one of ordinary skill in the art (See MPEP 2144.04 VI (A)). Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have a third mold wherein first and second molds rotate around an axis outside the third mold in order to enable the production of articles that require exclusive rotation steps during their manufacture.

Regarding Claim 10, Bodmer shows the process as claimed as discussed in the rejection of Claim 7 above, including a method wherein use is made of a first series of mold parts and a

Art Unit: 1732

second series of mold parts provided on a common supporting structure, whereby, from a general point of view, they are mutually situated at an angle with their land areas, and whereby the first series of mold parts and the second series of mold parts can alternately be placed opposite to the third series of mold parts by rotating the aforesaid supporting structure around an axis of rotation which extends according to the bisector between the aforesaid two land areas (Figure 1), meeting applicant's claim.

Regarding Claim 11, Bodmer shows the process as claimed as discussed in the rejection of Claim 7 above, including a method wherein the third series of mold parts, in order to make them alternately work in conjunction with the first series and the second series, is rotated between the first series and the second series (Figure 1), meeting applicant's claim.

Allowable Subject Matter

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

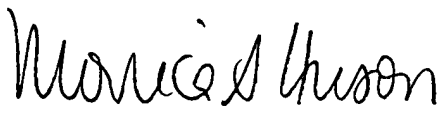
Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica A. Huson whose telephone number is 571-272-1198. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm.

Art Unit: 1732

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Colaianni can be reached on 571-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Monica A Huson
January 23, 2006


MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER